

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (currently amended) A fuel cell comprising:
a hydrogen flow path configured to pass hydrogen into communication with an anode catalyst of an MEA;
a coolant flow path configured to pass coolant through the fuel cell to cool the fuel cell;
an enclosure encompassing at least a part of the coolant flow path, the at least a part of the coolant flow path comprising a coolant reservoir; and
a passive hydrogen vent configured to vent hydrogen from the enclosure without reliance upon any electrical device and configured to maintain the hydrogen concentration within the enclosure below about 4 percent.
2. (previously presented) A fuel cell according to Claim 1, wherein the enclosure surrounds a member selected from the group consisting of a fuel cell stack through which the hydrogen flow path and the coolant flow path pass, a coolant reservoir of the coolant flow path, and a hydrogen supply reservoir of the hydrogen flow path.
3. (original) A fuel cell according to Claim 2, wherein the hydrogen vent comprises a porous material selected from the group consisting of cellulose, plastic and metal.
4. (previously presented) A fuel cell according to Claim 1, wherein the enclosure surrounds a coolant reservoir and the hydrogen vent is located within a wall of the coolant reservoir.

5. (previously presented) A fuel cell according to Claim 4, wherein the hydrogen vent is further configured to substantially prevent the liquid coolant from passing through the vent.

6. (cancelled)

7. (currently amended) A fuel cell according to Claim 1 [[6]], wherein the hydrogen vent is configured to maintain a hydrogen concentration within the enclosure below about 1 percent without reliance upon any electrical device.

8. (previously presented) A fuel cell according to Claim 1, further comprising:

a second enclosure encompassing at least a part of the hydrogen flow path, the coolant flow path, or both; and

a hydrogen vent configured to vent hydrogen from the second enclosure.

9. (original) A fuel cell according to Claim 8, wherein one of the enclosure or the second enclosure encompasses the other of the enclosure or the second enclosure.

10. (previously presented) A fuel cell according to Claim 1, wherein the hydrogen vent is further configured to prevent a flame front from passing through the vent.

11. (currently amended) A method of manufacturing an MEA fuel cell, comprising:

creating a hydrogen fuel flow path to conduct hydrogen through the MEA fuel cell;

creating an enclosure around a fuel cell stack which captures hydrogen that leaks, directly or indirectly, from the hydrogen fuel flow path; and

providing a hydrogen vent in the enclosure, the hydrogen vent configured to passively maintaining maintain the level of hydrogen which leaks into the enclosure below a concentration level of about 4 percent.

12. (previously presented) A method of manufacturing a fuel cell according to Claim 11, wherein the enclosure is a coolant flow path configured to conduct a liquid coolant through the fuel cell.

13. (previously presented) A method of manufacturing a fuel cell according to Claim 12, wherein passively maintaining the level of hydrogen further comprises selecting a porous material capable of passing hydrogen therethrough and capable of substantially preventing the liquid coolant from passing therethrough.

14. (original) A method of manufacturing a fuel cell according to Claim 13, further comprising locating the porous material in a wall of a coolant reservoir of the coolant flow path.

15. (original) A method of manufacturing a fuel cell according to Claim 12, wherein passively maintaining the level of hydrogen further comprises passively maintaining the level of hydrogen which leaks into the enclosure below a concentration level of about 1 percent.

16. (previously presented) A method of manufacturing a fuel cell according to Claim 11, further comprising creating a coolant flow path to conduct coolant through the fuel cell, and wherein the enclosure surrounds a member selected from the group consisting of a fuel cell stack through which the hydrogen fuel flow path and the coolant flow path pass, a coolant reservoir of the coolant flow path, and a hydrogen supply reservoir of the hydrogen fuel flow path.

17. (original) A method of manufacturing a fuel cell according to Claim 16, wherein passively maintaining the level of hydrogen further comprises selecting a

porous material capable of passing hydrogen therethrough and capable of substantially preventing a flame front from passing therethrough.

18. (original) A method of manufacturing a fuel cell according to Claim 17, wherein selecting a porous material further comprises selecting a porous material selected from the group consisting of cellulose, plastic and metal.

19. (currently amended) A method of manufacturing a fuel cell according to Claim 11, further comprising:

creating a second enclosure which captures hydrogen that leaks, directly or indirectly, from the hydrogen fuel flow path; and

providing a second hydrogen vent in the second enclosure, the second hydrogen vent configured to maintain the level of hydrogen which leaks into the second enclosure below a concentration level of about 4 percent.

20. (original) A method of manufacturing a fuel cell according to Claim 19, wherein one of the enclosure or the second enclosure encompasses the other of the enclosure or the second enclosure.